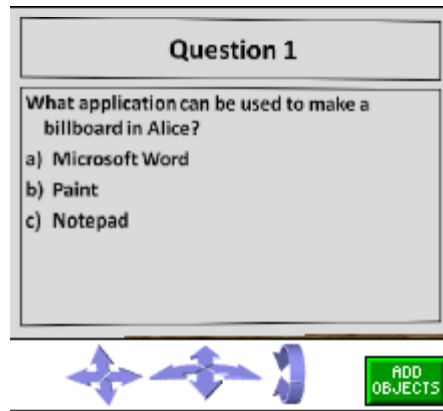


# Making Billboards



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# Loading the World

- Open a new world, with any template
- Save it in a directory that you can find again, and then start Alice and open the world.
- NOTE: You cannot double-click the file to open it
- Windows will not know what to use, and even if you select Alice from a list of programs, the loading will fail.

# Loading (cont 1)

- First: It is always a good idea to drop a Dummy Camera in the original position. After you have opened the file, and set up your world, go into the "Layout" mode by clicking on the green button **Add Objects** (toward the middle of screen)
- Click **more controls**. Click **drop a dummy at the camera**. Rename the dummy 'originalPosition.'  
To leave the layout mode, click **done**

# Use of a Billboard

- Billboards can be used to add text to your world
- They can be made in
  - Paint
  - Power Point
  - Or any other tool that can have text and graphics and saved as an image file

# In Paint

- Open up a paint document
- Click on the A to add text
- Type the following into your text box:



Instructions:

- Press the Up arrow to move forward
- Press the space bar to jump
- Press i to show the instructions or make them disappear

# Paint: Increasing the size

- Your text might be really small.
- To increase the size:
  - Click on the View
  - View text toolBar
  - Increase the size to 18 or how every big you want

## Instructions

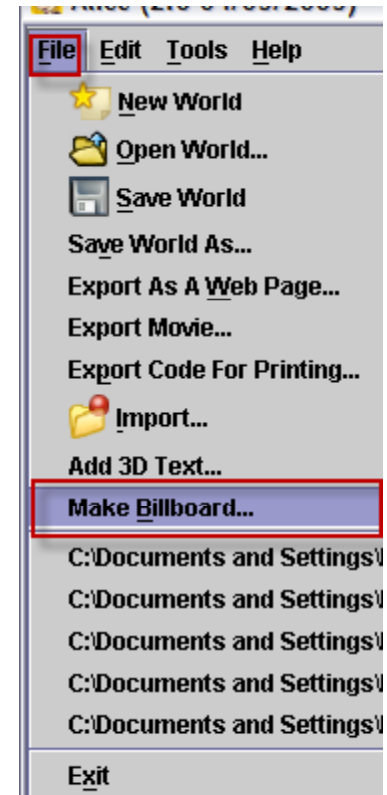
- Press the Up arrow to move forward
- Press the space bar to jump
- Press i to show these instructions or make them disappear

# Adding Graphics

- We just added text to our instructions but feel free to use the graphics in paint to draw shapes such as circles or rectangles for legends

# Save Paint & Open Alice

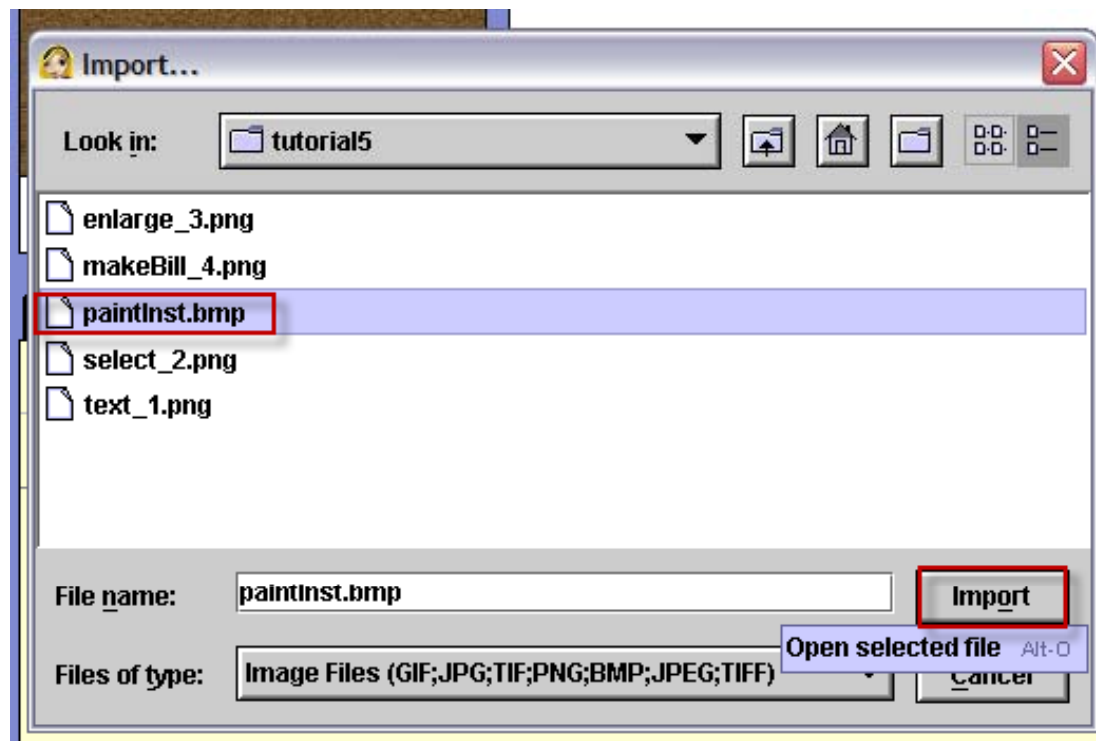
- Now, save your document as an image type such as .png, .jpg, .bmp, etc.
- In your Alice world, click on the file menu and select **Make Billboard**





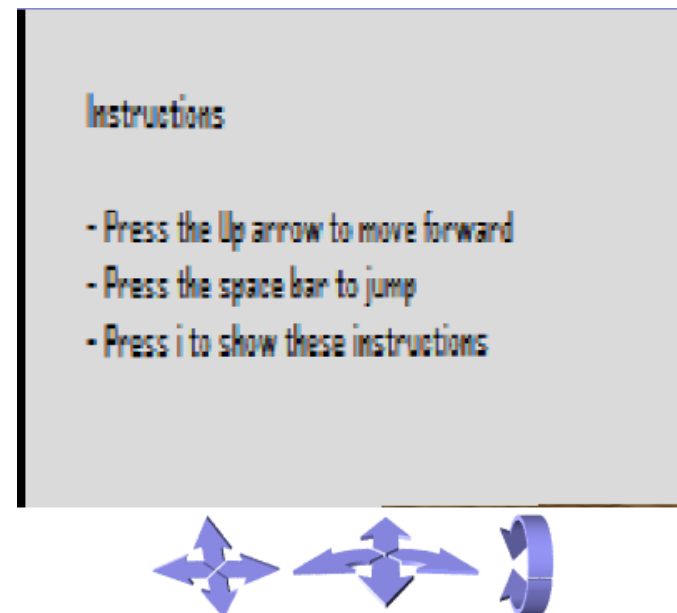
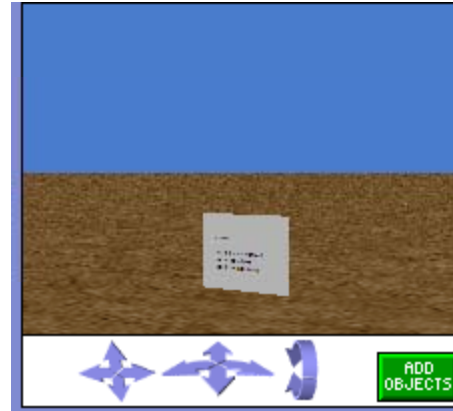
# Import paint billboard

- Find your paint document in the directory that you saved it in
- Click import



# Reposition the billboard

- Now, the billboard has appeared in the world:
- Click on the **Add Objects** button
- Enlarge the billboard with the **resize** button
- Use the **left/right** to make the billboard face the camera
- And use the **mouse** to bring it forward

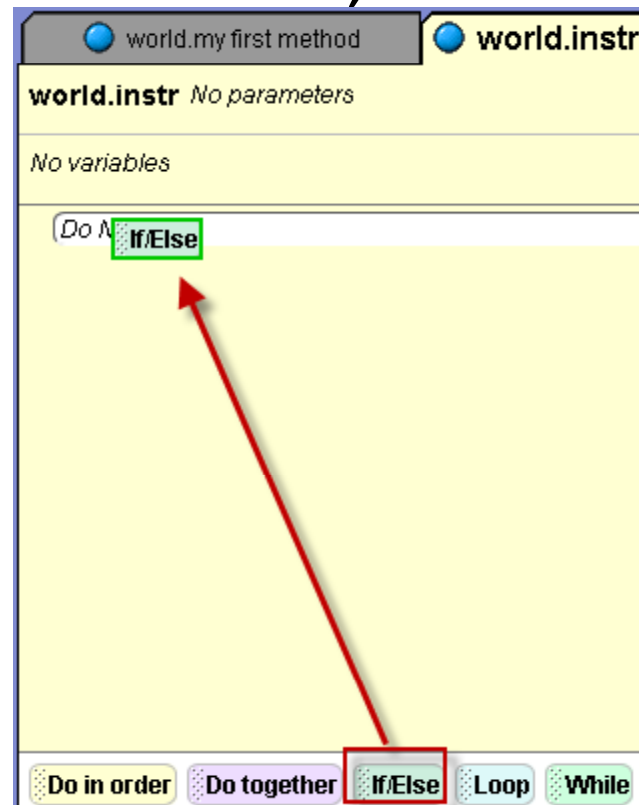


# Create a world method

- Let's write a method to make the instructions either visible or invisible:
- Click on the **world** in the object tree
- Select the **method** tab
- Click **create new method**
- Name it **instr**

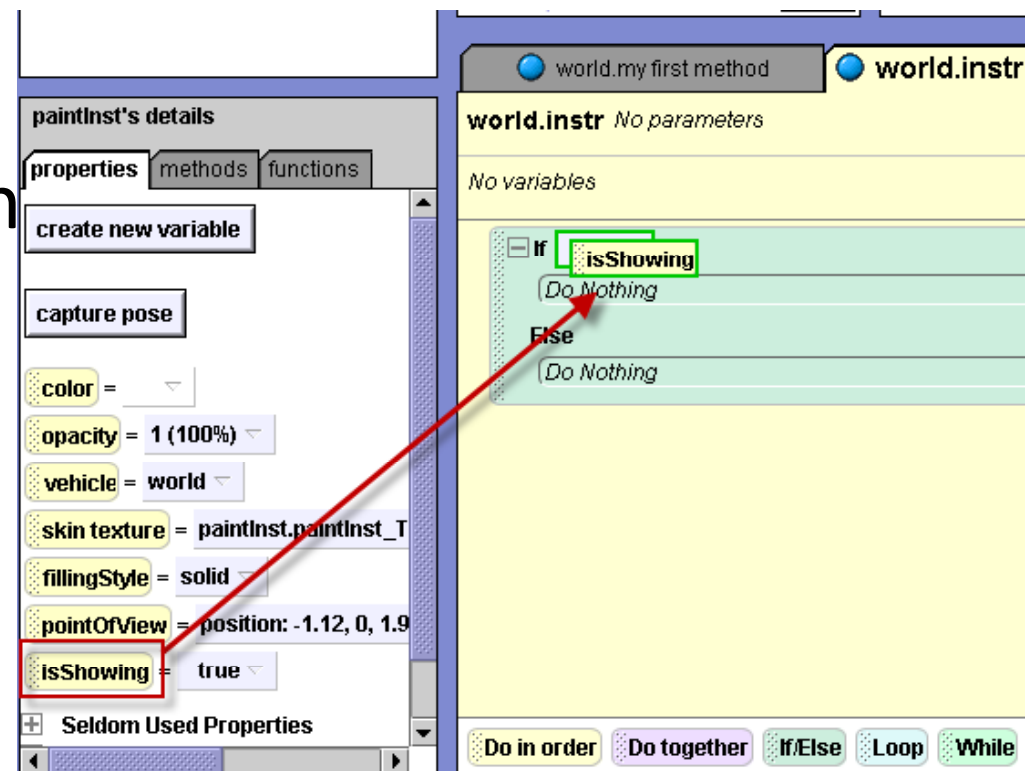
# Writing instr

- Click on **if/else** and drag it into your method
- In the drop down menu, select **true**



# Write Instr (cont 1)

- Click on your billboard in the object tree
- Click on the properties tab
- Drag **isShowing** into **world.instr** on top of **true**



## Write instr (cont 2)

- Then, drag **isShowing** into the method again, on top of the first **Do Nothing**. In the drop down menu, select **false**.
- Drag **isShowing** into the method again, on top of the **Do Nothing** that is underneath **else**. In the drop down menu, select **true**.
- See the screenshot on the next slide for an illustration of what your method should look like now

# Complete Instr Method

The image shows the 'world.instr' method editor in a Scratch-like environment. The top bar has two tabs: 'world.my first method' and 'world.instr', with the latter being active. Below the tabs, the text 'world.instr No parameters' is displayed on the left, and a 'create new parameter' button is on the right. A second row shows 'No variables' on the left and a 'create new variable' button on the right. The main workspace contains an 'If' block with the condition 'paintInst < . isShowing <'. The 'If' block has two branches: a top branch with 'paintInst < set isShowing to false < more...' and an 'Else' branch with 'paintInst < set isShowing to true < more...'. At the bottom, a palette of block types is visible, including 'Do in order', 'Do together', 'If/Else', 'Loop', 'While', 'For all in order', 'For all together', 'Wait', 'print', and a comment block.

world.my first method   world.instr

**world.instr** *No parameters* create new parameter

*No variables* create new variable

**If** paintInst < . isShowing <

paintInst < set isShowing to false < more...

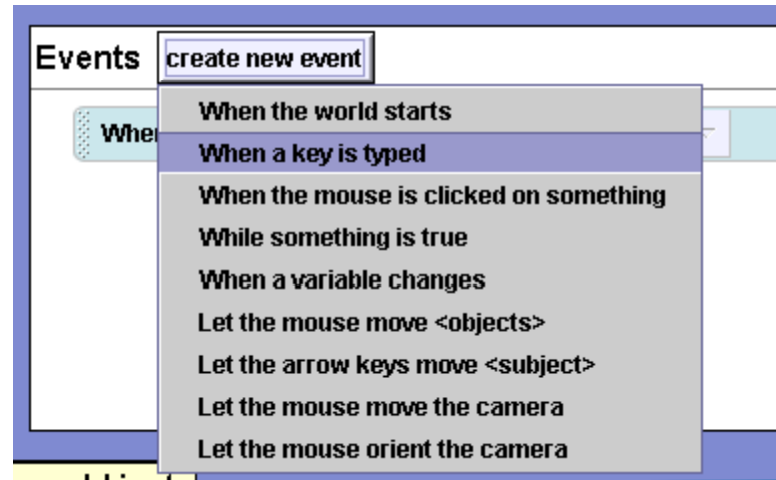
**Else**

paintInst < set isShowing to true < more...

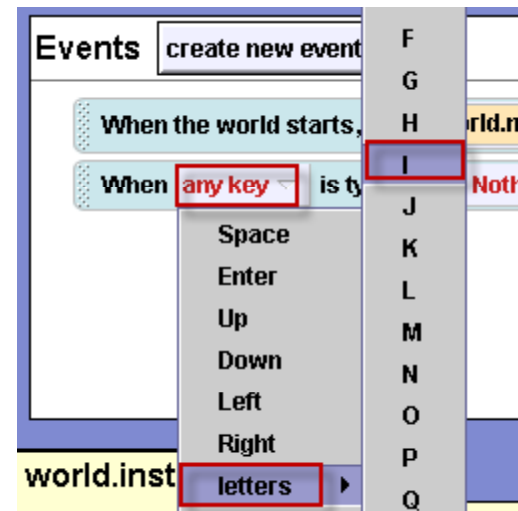
Do in order Do together If/Else Loop While For all in order For all together Wait print //

# Create new event

- Click on the **create new event**
- Select when a **key is typed**



- Click on **any key**.
- Select **letters**, and select **i**






# Create new event (cont 1)

- Click on **Nothing** and select **instr**



- Play your world. Press i to make the billboard disappear and reappear

# In Power Point

- You can also use Power Point to make a billboard
- Open up a Power Point document
- Make one slide. type the text until your slide looks like this 
  - I've added a border around the text

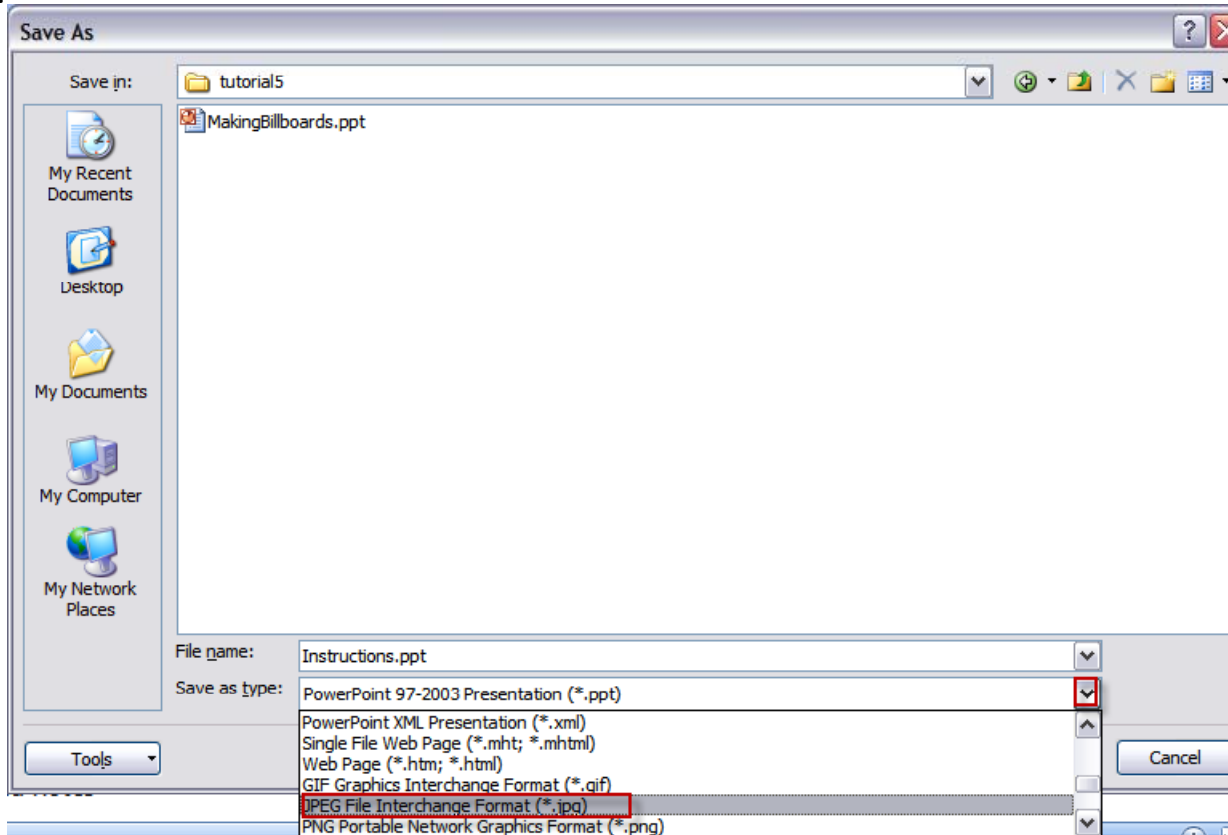
## Question 1

What application can be used to make a billboard in Alice?

- a) Microsoft Word
- b) Paint
- c) Notepad

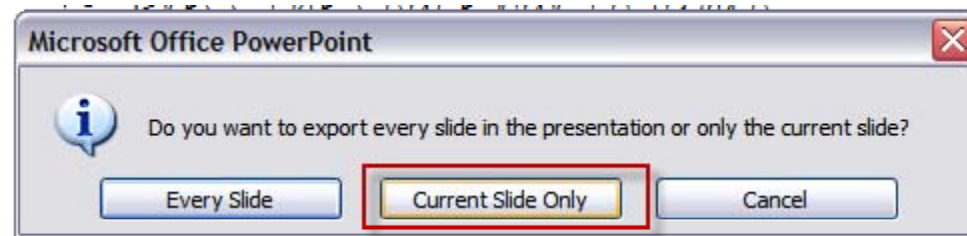
# Saving the power point

- When you save the Power Point, select the file type: .JPG



# Saving the power point

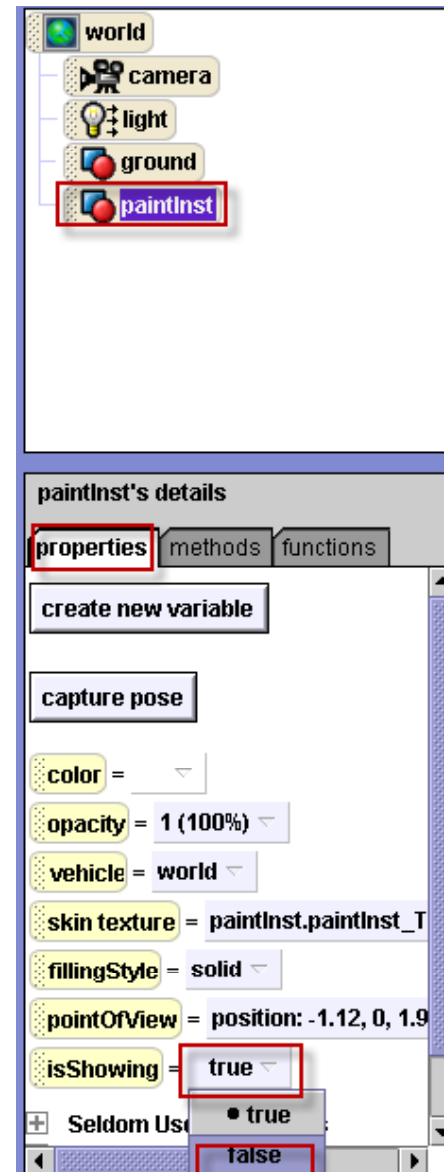
- Click save (in a directory you can find again)
- When this window pops up,




- Click on **current slide only**
- In order to import a file as a billboard, it must have an image file extension

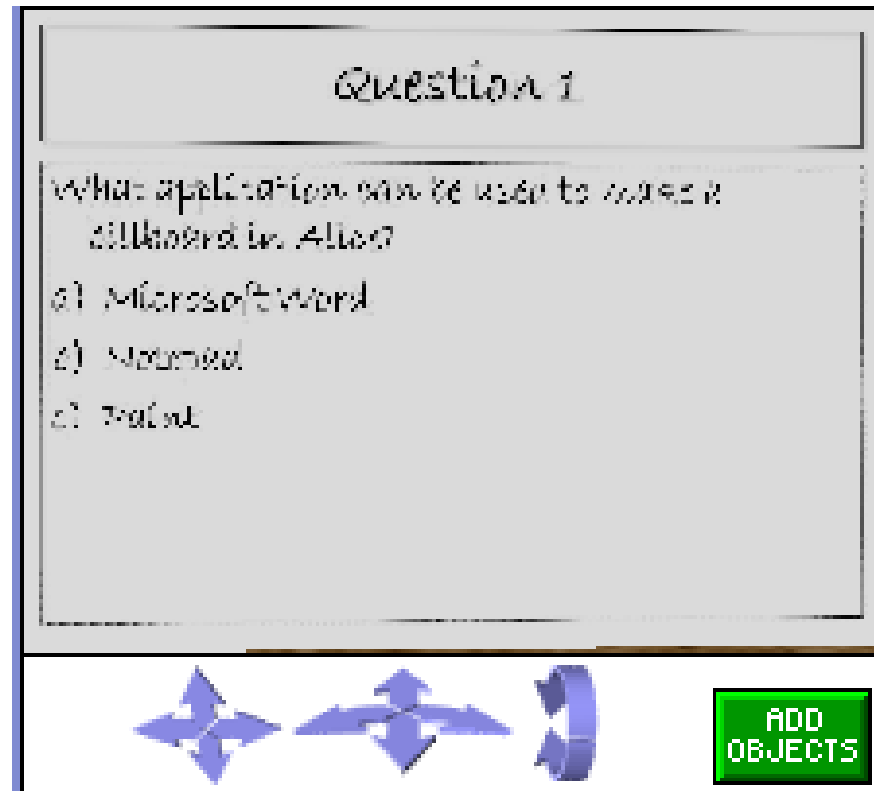
# Make Paint Billboard invisible

- Click on your paint billboard in the object tree.
- Click on the **properties** tab and set **isShowing** to false.



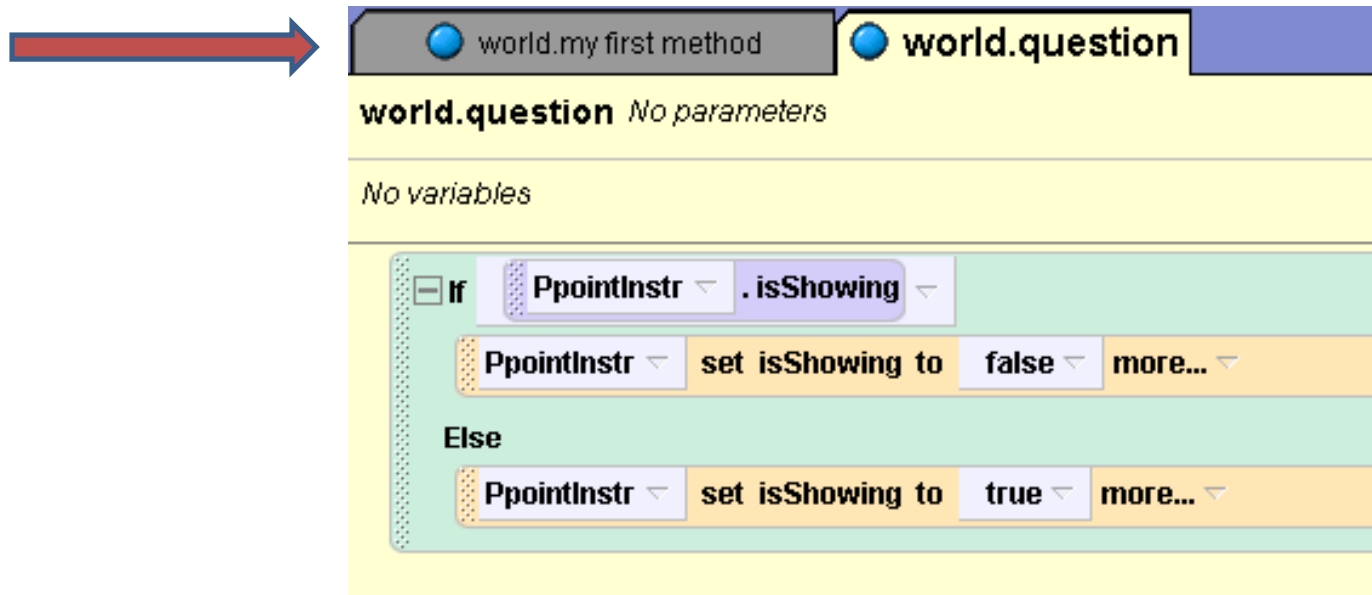
# Import power point billboard

- Now in your Alice world, go to the file menu and select **Make Billboard**
- Find your power point slide and import it into your world
- Move and resize your billboard until it looks like this: 



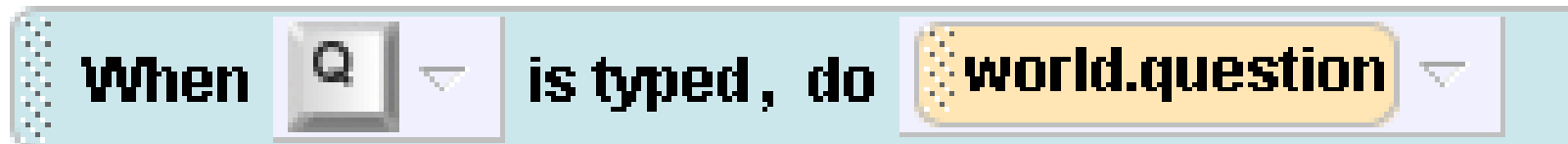
# Write a method

- In World details, **create a new method**
- Name it question
- Drag in the if statement and the **isShowing** instructions until your method looks like this:



# Create a new event to alternate between the billboards

- Now, create a new event, **when a key is typed**
- Select the letter **q**; then select **question**
- Your event should look like this



- Now, play your world. Press i and q to alternate between the two billboards



# Recap

- You can make a billboard to give the user instructions, ask multiple choice questions, etc
- Use either paint or power point to make the billboards
- It is helpful to use an event to give the user the choice of making billboards appear or disappear
- But, you can also just set **isShowing** to true or false in your method at the appropriate time